Purpose:

To emphasize the big ideas about chemical equilibrium

Additional Details:

I started the equilibrium unit with this simple lab. Through performing this lab and plotting their data on graph papers, students were able to figure out that at equilibrium, rates of forward and reverse reactions are equal (as represented through the plateau in graph). I was also able to clarify the misconception that concentrations of reactants and products do not have to be equal at equilibrium.

I demonstrated first three trials to students and emphasized on simultaneous transferring of water between two cylinders. Students performed the lab in pairs. After students are done with the lab, graph papers were provided to them to plot their data. Then students worked in groups of four to answer the follow-up questions and presented their answers on chart papers provided to them. In the end, the answers of different groups were compared and the BIG IDEAS were emphasized.